# STATE OF MINNESOTA

# **ENVIRONMENTAL QUALITY BOARD**

In the Matter of the Application by Mankato Energy Center, LLC, for a Certificate of Need for a Large Electric Power Generating Plant in Blue Earth County, Minnesota, and an Application for a Site Permit for the Plant and a Route Permit for a High Voltage Transmission line. ENVIRONMENTAL ASSESSMENT SCOPING DECISION

EQB Docket No. 04-76-PPS-Calpine PUC Docket No. IP6345/CN-03-1884

The above-entitled matter came before the Chair of the Minnesota Environmental Quality Board (MEQB) for a decision on the scope of the Environmental Assessment (EA) to be prepared on the proposal by Mankato Energy Center, a wholly owned subsidiary of Calpine Corporation, to construct a natural gas fired power plant in Mankato, Minnesota.

The EQB held a public meeting on April 21, 2004, to discuss the project with the public and to solicit input into the scope of the EA to be prepared. The public was given until May 10, 2004, to submit written comments regarding the scope of the EA. Several comments were filed with the EQB regarding the scope of the EA. Not all suggestions in the comments are included in this scoping document because although certain issues may be important for the Public Utilities Commission to address in determining the question of need for the proposed facility, not all of these issues are necessarily ones that are properly addressed in the Environmental Assessment prepared by the EQB.

Having reviewed the comments submitted and consulted with EQB staff, I hereby make the following Scoping Order.

### MATTERS TO BE ADDRESSED

The Environmental Assessment on the proposed Mankato Energy Center project will address the following matters:

#### 1.0 INTRODUCTION

(A brief overview of the process involved and identification of what is discussed in the document.)

## 2.0 PROJECT DESCRIPTION

2.1 **The Plant** (The following specific features of the proposed power plant as proposed by the applicant will be described. The description will address the entire 655 MW that are proposed because the Site Permit requests that amount.)

- 2.1.1 General
- 2.1.2 Power Generating Equipment and Processes
- 2.1.3 Air Emission Control Equipment
- 2.1.4 Water Use
- 2.1.5 Wastewater
- 2.1.6 Solid and Hazardous Waste Generation
- 2.1.6 Fuel Supply
- 2.2 **The High Voltage Transmission Line** (The following specific features of the short interconnection to the nearby Wilmarth Substation will be described. Xcel Energy will actually be the applicant for the route permit for the HVTL.)
  - 2.2.1 General
  - 2.2.2 Design
  - 2.2.3 Right-of-Way Requirements and Acquisition
  - 2.2.4 Construction
  - 2.2.5 Operation and Maintenance
- 2.3 **The Pipeline** (A natural gas pipeline is also required as part of this project, and the features of the pipeline will be described.)

# 3.0 DESCRIPTION OF ALTERNATIVES TO THE PROPOSED POWER PLANT

(A general description of the following alternatives will be included. The number of alternatives to be considered is less than what the rules specify because the PUC granted an exemption from some of these requirements in its order of Feb. 6, 2004.)

- 3.1 No-build Alternative
- 3.2 Natural Gas/Wind Combination (This alternative will address the possibility of substituting wind generated power for the power proposed to be generated by the nonexempt portion of the facility.)
- 3.3 Alternative Back-Up Fuels (The possibility of using something other than fuel oil to back-up the natural gas.)
  - 3.3.1 Biodiesel
  - 3.3.2 Biomass
  - 3.3.3 Ethanol
- 3.4 Alternative Types of Generation
  - 3.4.1 Oil-fired Combined Cycle Turbine
  - 3.4.2 Simple Cycle Combustion Turbine

#### 3.5 Transmission Rather than Generation

# 4.0 ANALYSIS OF IMPACTS OF THE PROJECT AND EACH ALTERNATIVE

(This section will describe the potential environmental and human effects related to the generation of electricity through the various alternative means described in section 3.0.)

- 4.1 Air Quality Impacts
- 4.2 Water Quality Impacts
- 4.3 Solid and Hazardous Wastes
- 4.4 Noise Impacts
- 4.5 Land Use Impacts
- 4.6 Impacts on Cultural Resources
- 4.7 Fuel Availability
- 4.8 Impact on Transmission Grid

## 5.0 POTENTIAL SITE SPECIFIC EFFECTS

(This section will describe the potential environmental effects of locating the project on the site proposed by the applicant. Because this information will be considered by the EQB in considering the request for a site permit, the analysis will consider the full 655 MW of capacity. No alternative sites to the one proposed by the applicant are evaluated.)

- 5.1 Air Quality
  - 5.1.1 Criteria Pollutants
  - 5.1.2 Hazardous Air Pollutants
- 5.2 Biological Resources
  - 5.2.1 Flora
  - 5.2.2 Fauna
  - 5.2.3 Rare & Unique Natural resources
- 5.3 Cultural Resources
  - 5.3.1 Public Services & Infrastructure
  - 5.3.2 Archaeological & Historic Resources
- 5.4 Geology and Soils
- 5.5 Health and Safety
- 5.6 Land Use
  - 5.6.1 Zoning & Displacement
  - 5.6.2 Aesthetics & Visual Impacts

- 5.7 Noise
  - 5.7.1 Project Noise
  - 5.7.2 Noise Standards
  - 5.7.3 Current Noise Environment
- 5.8 Transportation
- 5.9 Water Resources
  - 5.9.1 Surface Water
  - 5.9.2 Groundwater
  - 5.9.3 Minnesota River Impacts from Water use and wastewater reuse5.9.3.1 Low flow conditions5.9.3.2 Evaporative Withdrawal
  - 5.9.4 Wetlands
- 5.10 Waste Management and Disposal

# 6.0 POTENTIAL ENVIRONMENTAL EFFECTS OF THE PROPOSED TRANSMISSION LINE

(This section will describe the potential environmental effects of the 115 kV transmission line that will connect the new plant to the Wilmarth Substation.)

- 6.1 Air Quality
- 6.2 Biological Resources
  - 6.2.1 Flora
  - 6.2.2 Fauna
  - 6.6.3 Rare & Unique Natural Resources
- 6.3 Cultural Resources
  - 6.3.1 Human Settlements
  - 6.3.2 Archaeological & Historic Resources
  - 6.3.3 Radio and TV Interference
- 6.4 Geology and Soils
- 6.5 Electric and Magnetic Fields
- 6.6 Land Use
  - 6.6.1 Zoning & Displacement
  - 6.6.2 Aesthetics & Visual Impacts
- 6.7 Noise
- 6.8 Transportation
- 6.9 Water Resources

- 6.9.1 Surface Water
- 6.9.2 Groundwater
- 6.9.3 Wetlands

## 7.0 ANALYSIS OF MITIGATIVE MEASURES

(Any specific measures for mitigating any potential environmental or human impacts of the proposed project or alternatives will be described.)

# 8.0 ANALYSIS OF THE FEASIBILITY AND AVAILABILITY OF EACH ALTERNATIVE.

#### 9.0 OTHER PERMITS

(A list of all permits that will be required by the applicant to construct the project will be included.)

### ISSUES OUTSIDE THE SCOPE OF THE EA

The EQB will not, as part of this environmental review, consider the following matters:

- 1. Whether a different size or different type of transmission line should be built.
- 2. Whether no transmission line should be built.
- 3. Whether the proposed natural gas-fired turbines should be located on a site other than the one proposed by the applicant.
- 4. What the relationship of the proposed facility is to overall state energy needs.
- 5. Whether the proposed facility satisfies state renewable energy goals
- 6. Whether the proposed project is compatible with the state's current energy mix
- 7. What markets power from the proposed facility will serve.

### **SCHEDULE**

The EA will be completed by July 1, 2004.

Signed this 20 day of May, 2004

STATE OF MINNESOTA

ENVIRONMENTAL QUALITY BOARD

Robert A. Schroeder.

Chair